CITY OF NEWARK
DELAWARE

Aerial to Underground Lines and Grades Electric Checklist

Section 1 – Design Requirements

1. All existing utilities must be surveyed and shown on the plans.

2. The proposed meter(s) location must be shown on the plans.

3. The proposed electric cable locations must be shown on the plans.

4. The developer must send the load calculation and one-line diagram to the Electric Department as a part of the submission to receive a cost estimate prior to lines and grades approval.

5. An open utility easement is required and must be listed on the prints. In addition, a 5-foot electric utility easement must be shown behind the sidewalk for any underground electrical infrastructure.

6. If the developer plans to add EV chargers, include the EV load in the load calculations. The EV charging stations must be shown on the plan.

7. The developer must submit the service and meter application. To obtain an application form or apply online, go to https://newarkde.gov/DocumentCenter/View/99/Figure-1---Service--Meter-Application?bidId=

Section 2 – Notes Requirements

Please add the following electric notes to the plans:

1. All the electric services to the existing building(s) need to be disconnected before their demolition.

2. The developer is responsible for supplying and installing all underground secondary cables and conduits per NEC requirements and city standards **STD-100E1-3 and STD-201E**.

3. All parts of proposed buildings shall be at least 12.5 feet away from aerial lines.

4. The city will supply current transformers and meter box for instrument-rated services for installation by the customer. The customer shall supply an approved lockable 11-inch-deep cabinet to install current transformers. The customer shall furnish a 1.5-inch rigid metallic conduit between the metering cabinet and the meter. The maximum

length of the 1.5-inch conduits shall be 50 feet. Instrument-rated metering installations shall have phase conductors broken and reconnected ahead of current transformers using BURNDY-UNITAP or NSI-POLARIS connectors. The phase and neutral conductors shall have a 24-inch tapped #12 copper conductor to be used by the city for meter potential. **See STD-203E.**

5. A rigid galvanized steel or Schedule 80 PVC elbow and 10 feet of rigid galvanized steel or schedule 80 PVC conduit is required at any service pole. The rigid steel galvanized conduit shall be bonded to a pole ground with a conduit ground clamp. The remainder of the conduit may be PVC Schedule 40 unless going under roadways or driveways. The customer shall furnish such PVC conduit and standoffs to the city for installation by city crews if existing energized conductors are located on the service pole. Pull string shall be installed prior to building conduit up the pole. All conduits shall be stood off the pole a minimum of 1 + 5/8-inch. **See STD-199E**.

6. Maintain a minimum of 24 inches between meters and any gas piping. **See STD-12E.**

7. The developer must pay all costs for electric service infrastructure including material and labor. The price is subject to a yearly CPI escalation from the date of lines and grades approval.

8. All meters must be grouped in one location, and the developer must provide keys to access the electric meter room if meters are inside. The developer will be responsible for the cost of the electric meters.

9. All meters and disconnecting devices shall be grouped together and arranged so that services for each unit can be properly and independently controlled from a point readily accessible to both the customer and the City. Additionally, each meter and disconnect switch shall be permanently marked with the address served by that equipment.

10. Ringless meter sockets are required except for manufactured group meter installations, if ringless is not available.

11. The developer agrees to pay up to $4,000 towards problem interference if the building is found to interfere with the City's smart metering system for electric meters when completed.

12. The proposed electric must be shown on the landscaping plans. No trees can be planted within 5 feet of underground electric cables and no trees reaching 18 feet at maturity can be planted under aerial lines. No shrubbery shall be installed within six (6) feet of the front of a pad mounted transformer or three (3) feet on the other sides.

13. The developer shall install a visible break, lockable disconnect switch ahead of any commercial service.

14. A site meeting is required to verify compliance with these standards. Conduit locations

at poles will also be verified.

15. City of Newark standards for electrical work must be included in the plans. Include the City standards relevant to your project and project type (Commercial or Residential) which can be found on the same site page. If using a single-phase transformer include STD9E. If using a three-phase transformer include STD18E.